

CLAIM AMENDMENTS

1. (Cancelled)

2. (Currently Amended) A communication device comprising:

one processor to run at least two operating systems simultaneously, wherein the at least two operating systems include:

a first operating system for mobile station functions comprising a first group of threads, the mobile station functions including operations for communicating with another device, and

a second operating system for data processing functions comprising a second group of threads, the data processing functions comprising operations for processing data internally in the communication device, the first and second operating systems communicating with each other,

the communication device further comprising at least one user interface,

~~A communication device according to claim 1 including~~

means for generating an interrupt to the processor,

means for selecting a thread from said first group of threads and second group of threads to execute as a result of said interrupt and as defined by any applications, said means for selecting including at least one at least partly common interrupt handler for said at least two operating systems, and

means for transmitting interrupt data to the operating system from which the thread was selected including said thread to execute.

3. (Cancelled)

4. (Currently Amended) A communication device according to ~~claim 3~~claim 9, wherein said first user interface relates at least partly to said mobile station functions, and said second user interface relates at least partly to said data processing functions.

5. (Original) A communication device according to claim 4, wherein said first user interface is a phone interface, and said second user interface is a personal digital assistant interface.

6. (Currently Amended) A communication device according to ~~claim 3~~claim 9 including means for moving from the execution of the first operating system to the execution of the second operating system, when no thread of the first operating system is running.

7. (Currently Amended) A communication device according to ~~claim 3~~claim 9 including means for moving from the execution of the second operating system to run the first operating system when an interrupt to the processor affects the running of at least one thread under the first operating system.

8. (Currently Amended) A communication device according to ~~claim 3~~claim 9, wherein at least the first operating system is a real time operating system.

9. (Currently Amended) A communication device comprising one processor to run at least two operating systems simultaneously, wherein the at least two operating systems include

a first operating system for mobile station functions comprising a first group of threads, the mobile station functions including operations for communicating with another device, and

a second operating system for data processing functions comprising a second group of threads, the data processing functions comprising operations for processing data internally in the communication device,

wherein the first and second operating systems communicate with each other,

the communication device further comprising at least a first user interface and a second user interface,

~~A communication device according to claim 3, wherein the processor comprises at least the following modes:~~

user mode,

privileged mode,

undefined mode, and

one or more interrupt modes,

and that the first operating system being operable at least partly in the undefined mode, the second operating system being operable at least partly in the user mode, and that

the interrupt handler being operable in some of the one of more interrupt modes.

10. (Currently Amended) A communication device according to ~~claim 3~~claim 9, the threads of said first group of threads one thread comprising said second operating system.

11. (Cancelled)

12. (Currently Amended) A communication device according to ~~claim 11~~claim 13, wherein said first user interface relates at least partly to said mobile station functions, and said second user interface relates at least partly to said data processing functions.

13. (Currently Amended) A communication device comprising:

a processor to simultaneously run a first operating system for mobile station functions comprising a first group of threads, the mobile station functions including operations for communicating with another device, and to simultaneously run a second operating system for data processing functions comprising a second group of threads, the data processing functions comprising operations for processing data internally in the communication device,

the first and second operating systems communicating with each other,

at least a first user interface and a second user interface,

~~A communication device according to claim 11 including~~

means for generating an interrupt to the processor,

means for selecting a thread from said first group of threads and second group of threads to execute as a result of said interrupt and as defined by any applications, said means for selecting including at least one at least partly common interrupt handler for said at least two operating systems, and

means for transmitting interrupt data to the operating system from which the thread was selected including said thread to execute.

14. (Currently Amended) A communication device according to ~~claim 11~~claim 13, wherein said first user interface is a phone interface, and said second user interface is a personal digital assistant interface.

15. (Currently Amended) A communication device according to ~~claim 11~~claim 13 including means for moving from the execution of the first operating system to the execution of the second operating system, when no thread of the first operating system is running.

16. (Currently Amended) A communication device according to ~~claim 11~~claim 13 including means for moving from the execution of the second operating system to run the first operating system when an interrupt to the processor affects the running of at least one thread under the first operating system.

17. (Currently Amended) A communication device comprising:

a processor to simultaneously run a first operating system for mobile station functions comprising a first group of threads, the mobile station functions including operations for communicating with another device, and to

simultaneously run a second operating system for data processing functions comprising a second group of threads, the data processing functions comprising operations for processing data internally in the communication device, the first and second operating systems communicating with each other, and
at least a first user interface and a second user interface.

~~A communication device according to claim 11,~~ wherein the processor comprises at least the following modes:

user mode,

privileged mode,

undefined mode, and

one or more interrupt modes,

and that the first operating system being operable at least partly in the undefined mode, the second operating system being operable at least partly in the user mode, and that the interrupt handler being operable in some of the one of more interrupt modes.

18. (Currently Amended) A communication device according to ~~claim 11~~claim 13, the threads of said first group of threads one thread comprising said second operating system.

19. (Currently Amended) The communication device according to ~~claim 1~~claim 2, wherein to simultaneously run the at least two operating systems the one processor is adapted to enable both the first operating system to set at least one thread of the

first group of threads to be active, and the second operating system to set at least one thread of the second group of threads to be active at the same time.

20. (Currently Amended) The communication device according to ~~claim 3~~claim 9, wherein to simultaneously run the at least two operating systems the one processor is adapted to enable both the first operating system to set at least one thread of the first group of threads to be active, and the second operating system to set at least one thread of the second group of threads to be active at the same time.